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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/890,977	10/19/2001	Jia Hong Yin	20-971	9795

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William H Bollman  
Manelli Densison & Selter  
2000 M Street NW Suite 700  
Washington, DC 20036-3307

EXAMINER

PATEL, SHEFALI D

ART UNIT

PAPER NUMBER

2621

DATE MAILED: 11/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/890,977

Applicant(s)

YIN, JIA HONG

Examiner

Shefali D Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9, 11-13 and 15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11-13 and 15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 October 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Oath/Declaration*

1. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

It does not identify the foreign application for patent or inventor's certificate on which priority is claimed pursuant to 37 CFR 1.55, and any foreign application having a filing date before that of the application on which priority is claimed, by specifying the application number, country, day, month and year of its filing.

2. Receipt is acknowledged of papers filed under 35 U.S.C. 119 (a)-(d) based on an application filed in United Kingdom on February 11, 1999 (GB 9903126.2). Applicant has not complied with the requirements of 37 CFR 1.63(c), since the oath, declaration or application data sheet does not acknowledge the filing of any foreign application. A new oath, declaration or application data sheet is required in the body of which the present application should be identified by application number and filing date.

### *Preliminary Amendment*

3. Preliminary amendment was filed on October 19, 2001 and claims 10, 14, and 16 have been cancelled as requested on page 6 and have been made of record.

### *Drawings*

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: **elements 100 and 106a-106d are not disclosed in the specification with regards to Figure 6**. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the

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reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-4, 7, and 9-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Astle (US 5,812,787).

With regard to claim 1, Astle discloses an apparatus for encoding information into a moving image sequence (encoding system 100, col. 4 lines 52-53, for video image signal sequences. Figure 1), comprising means for identifying a region in a image in the sequence (encoder 100 identifying the region (i.e., foreground/background) in a image at col. 7 lines 19-21 and col. 10 lines 23-27), means for determining whether the said region is a moving or static region (performing motion compensation an determining the moving (foreground) and static (background) region at col. 10 lines 32-45) and means for inserting a coded into at least said

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moving image region (encoder 100 inserting the code into moving (foreground) image region at col. 10 lines 32-45, 48-49). Also see the abstract of Astle's invention.

Claim 2 recites identical features as claim 1 except claim 2 is a decoding apparatus.

Astle discloses decoding apparatus 200 at col. 5 lines 32-41 as shown in Figure 2. Thus, arguments similar to that presented above for claim 1 is equally applicable to claim 2.

With regard to claim 3, Astle discloses apparatus to claim 1 wherein means is provided to identify moving and static edges and signals representative of said moving and static image regions are sent via first and second channels so that code is inserted into or recovered from either or both of said channels (moving and static edges and signal are sent via bus 108 and system bus 114 as seen in Figures 1-2 and at col. 5 lines 10-20, col. 6 lines 4-8).

With regard to claim 4, Astle discloses first and second code inserted into first and second channel, respectively at col. 10 lines 32-49.

With regard to claim 7, Astle discloses inserting code into a moving image in such a way that the code is resistant to image compression (col. 5 lines 13-16 and lines 42-47).

With regard to claim 9 Astle discloses inserting the code into boundaries between regions of different chrominance at col. 7 lines 45-59 and also seen in Figure 3 (note, chrominance are represented by different symbols, such as, +, -, #, etc.).

With regard to claim 11, Astle discloses apparatus according to claim 1, which is included in video recording at col. 4 line 51.

With regard to claim 12, Astle discloses apparatus including a digital imager arranged to obtain images of moving objects on a static background and to transmit signals indicative of the objects to a location remote from said imager (col. 4 lines 57-61 and col. 5 lines 21-23).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 5-6 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Astle (US 5,812,787).

With regard to claims 5 and 6 Astle discloses codes with respect to moving and static images as discloses above in claim 1. Astle discloses all of the claimed subject matter as already discussed above and the arguments are not repeated herein, but are incorporated by reference. Astle does not expressly disclose whether the codes are identical or different. It would have been obvious matter of design choice to modify the Astle reference by having an identical or different codes since applicant has not discloses that having identical or different codes solves any stated problem (page 2 lines 4-8) or is for any particular purpose and it appears that the invention of Astle as disclosed at col. 10 lines 23-55 would perform equally well.

With regard to claim 13, it would have been obvious matter of design choice to modify the Astle reference by having an indicator of the amount of movement of the objects during a chosen time interval since applicant has not discloses that having a chosen time interval solves any stated problem (page 2 lines 4-8) or is for any particular purpose and it appears that the invention of Astle as disclosed at col. 10 lines 23-55 would perform equally well. It would be obvious to specify the time interval depending on one's preference, convenience, and/or necessitate.

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9. Claims 8 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Astle (US 5,812,787) in view of Tzou et al. (US 6,389,072) (hereinafter, "Tzou").

With regard to claim 8 Astle discloses apparatus of claims 1-2 and all of the claimed subject matter as already discussed above and the arguments are not repeated herein, but are incorporated by reference. Astle does not expressly disclose locating edges in the images and comparing relative positions of the corresponding edges in first and second images. Tzou discloses locating and comparing edges of the images at col. 8 lines 43 to col. 9 lines 1-4. Astle and Tzou are combinable because they are from the same field of endeavor, i.e., video encoding/decoding. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teaching of Tzou with Astle. The motivation for doing so is for image quality enhancements, by providing a modification of image quality based on both motion and location as suggested by Tzou at col. 8 lines 43-48. Therefore, it would have been obvious to combine Tzou with Astle to obtain the invention as specified in claim 8.

With regard to claim 8, Tzou discloses encoding a code in such a way that the code is resistant to low pass filtering (i.e., blurring, smoothing) (see, col. 8 lines 43-56 for image quality enhancement).

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 6,272,178; US 5,426,673; US 6,173,077.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shefali D Patel whose telephone number is 703-306-4182. The examiner can normally be reached on M-F 8:00am - 5:00pm (First Friday Off).

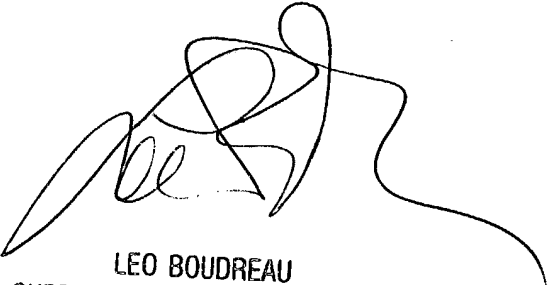
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo H Boudreau can be reached on 703-305-4706. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Shefali D Patel  
Examiner  
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October 31, 2004

A handwritten signature in black ink, appearing to read 'Leo Boudreau', with a long, sweeping horizontal line extending to the right.

LEO BOUDREAU  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600